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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/603,762	06/26/2003	Toshiyuki Kawaguchi	2003_0407A	4491

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EXAMINER

FISHMAN, MARINA

ART UNIT	PAPER NUMBER
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2832

DATE MAILED: 03/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/603,762	KAWAGUCHI ET AL.	
	Examiner	Art Unit	
	Marina Fishman	2832	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 16-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 June 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>09/25/03</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

General Status

1. Applicant's election without traverse of Group I, readable on Claims 1 – 15, in Paper filed on the 2/17/2004 is acknowledged.

Claims 16 – 18 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Group, there being no allowable generic or linking claim. Election was made **without** traverse in Paper filed on the 2/17/2004.

Drawings

2. Figure 18 - 21 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, "the cover base member" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

4. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of **50 to 150** words. It is important that the abstract not exceed **150** words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 6, 7, 12 - 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Lemarchand et al. [EP 0,981,144] (for the purpose of translation equivalent US 6,416,196 has been used).

Lemarchand et al. disclose a push-button switch member comprising:

- a key-top portion with a display section [Abstract, Figure 1];
- an area emitter member integrally formed with the display section, wherein the area emitter member is provided with

an light emitting layer, disposed between a base electrode and a transparent electrode that is arranged to be contacted to the display section and formed of a transparent conductive polymer [Column 3, lines 20 – 49];

- a movable contact point [42], that oppose to a stationary contact point [31];
- a circuit board [30].

Regarding Claims 6 and 7, Lemarchand et al. disclose the push-button switch member having elongated conductive members connected to the base and transparent electrodes are covered with elongatable insulating film and not overlapped with each other [Figure 1].

Regarding Claims 13 and 14, Lemarchand et al. disclose the push-button switch member having key-top body [4] with push projection [5] for contacting the moveable electrode [42] to the stationary [31] and transparent insulating film [Column 3, lines 30 – 44].

7. Claim 1 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Tanabe [US 5,871,088].

Tanabe discloses a push-button switch member comprising:

- a key-top portion with a display section [Figure 1];
- an area emitter member integrally formed with the display section, wherein the area emitter member is provided with an light emitting layer [5], disposed between a based

- electrode [7] and a transparent electrode [4] that is arranged to be contacted to the display section and formed of a transparent conductive polymer [Column 2, lines 44 – 58];
- a movable contact point [9a, 9], that oppose to a stationary contact point [11];
- a circuit board [10].

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 2, 3, 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanabe [US 5,871,088].

Regarding Claims 2, 3 and 5, Tanabe discloses the transparent electrode with conductive and transparent characteristics that can be improved by dispersing conductive powders in a insulating resin [4, Column 4, lines 1 –16], however does not discloses specific resistance and light transmittance of the electrode. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the transparent electrode with a surface resistance of not less than $10\Omega/\square$ and light transmittance of not more than 90%, since it has been held to be within the general skill of a worker in the art to select well known material on the basis of its suitability for the intended use as matter of obvious design choice. [In re Leshin, 125 USPQ 416].

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10. Claims 4, 8 – 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lemarchand et al. [EP 0,981,144] (for the purpose of translation equivalent US 6,416,196 has been used) in view of Tanabe [US 5,871,088].

Regarding Claim 4, Lemarchand et al. discloses the instant claimed invention except for the transparent electrode being colored. Tanabe discloses a push-button switch with the transparent electrode that is being colored [Column 6, lines 44 – 48]. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the transparent electrode that is colored in Lemarchand et al., as suggested by Tanabe, in order to vary color of the emitted light [Column 4, lines 50 – 54].

Regarding Claim 8, Lemarchand et al. disclose the instant claimed invention except for the insulating film having a storage modulus, at molding temperature, which is larger than a storage modulus of the conductive members. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the insulating film having a storage modulus (elasticity), at molding temperature, which is larger than a storage modulus of the conductive members, since it has been held to be within the general skill of a worker in the art to select well known material on the basis of its suitability for the intended use as matter of obvious design choice. [In re Leshin, 125 USPQ 416].

Regarding Claims 9 and 10, Lemarchand et al. disclose the instant claimed invention except for the base electrode and conductive member containing organic polymer and conductive filler with a side length not more than 1/3 of thickness of the

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conductive layer. Tanabe disclose the base electrode and conductive member containing organic polymer [Column 2, lines 44 – 48] and conductive filler [Column 4, lines 1 –16], however does not specify that the side length of the conductive filler is not more than 1/3 of thickness of the conductive layer. It would have been obvious to one having ordinary skill in the art at the time the invention was made to select the conductive filler with a side length not more than 1/3 of thickness of the conductive layer in Lemarchand et al. and Tanabe, since it has been held that discovering an optimum value of result effective variable involves only routine skill in the art. [In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980)].

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marina Fishman whose telephone number is 571-272-1991. The examiner can normally be reached on 7-5 M-T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Marina Fishman
March 1, 2004

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PRIMARY EXAMINER
GROUP 2103